Work Ordenser September - 11 - 1-				*124	417*							Page 1	1
Item ID: Revision ID:	D3637-041			Accept	*N900	0040	110	<b>N</b> *	Setup S	Start Stop		S1*	
Item Name:	Bracket Assembl	7	باده باد						,	stop	*N;	S2*	
Start Date: Required Date: Reference:		Start Qty: 8.00 Req'd Qty: 8.00	*8* *8*		Cust Item Customer:						÷.		
Approvals:	Process Plan:	MLS	Date: 14-09-	Tooling:	D	)ate:		]		Start	*N	R1*	
	QC:	ı	Date:	SPC (Y/N):	D	ate:			2	Stop	*N	R2*	
Sequence ID/ Work Center II		Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Rejec Qty		Reject Number	Insp. Stamp	
Draw Nbr	Revisi	on Nbr								-			
D3637	Rev B												
*100  *100* Waterjet FLOW CNC Waterje	2	ELOW WATER JET  Memo  1-Cut as po Deburr if n		0.00 0.00 r:	_ 2-			îΔ			De l	4/10/10	DAS 23 9-89
110	Q	2C2- Inspect parts off i	machine FAI/FAIB	0.00								/ /	DAS
*110* QC Quality Control		Memo		0.00				12			De!	14/10/10	9-89
120 *120*	Q	C8- Inspect parts - sec	cond check	0.00				(IZ)				DAS 38	- 10-1
QC		Memo		0.00						— -		9-89 /9	-10-1

0.00

Memo

Quality Control

DQA:			Date:											
						WORK ORDER NON-	-CC	ONFO	RMANCE / UP		( - O	آ باده معدل		AEROSPACE
QA Closed:			Date:				_				ork Order up	date only		
Work Orde	or.					DISPOSITION				AGAINST D	EPARTMENT	PROCESS		
WOIK OIG	-' .	<u>.</u>				Rework			Skid-tube	Crosstube	7	Water Jet	$\neg$	Engineering
Part N	lo.		<u></u>			Scrap			Machining	Small Fab	-	d. Eng. Coor.		Quality
NCR N	10.					Use-as-is Suspected Unapproved		Thern	noforming Large Fab	Finishing Composite	Rec/Stor	e/Packaging Supplier		Other
Root					Desci	ription of work order update	١	nitial	Actio	on	Sign &			
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Descrip	ption	Date	Verification	<u>1</u>	QC Inspector
Design														
Doc/Data														
Equip/Tooling							İ							
Handling/Pre														
Material														
Operator				ļ										
Offset/Setup														
Process														
Supplier														
Training			1											
Transport							1							
Unapproved													]	
							FAI	ULT CA	TEGORY					
Landi	ng (	Gear				General				·	_	-		
		Bending			,	Bend		Folio/F	Program	<u>_</u>	Outside Dim	ensions	-	Pressure/Forced
		Centre No	ot Concer	ntric	L	BOM/Route		Grain			Over/Under	tolerance	-	Set-up
		Cracks				Broken/Damage/Defect		Hardwa	are		Part Incorred	: [		Temperature/Cure
		Crimp/Kir	nk/Ripple	/Wave		Burrs		Inspect	ion Incomplete/Unc	qualified	Part Lost/Mi	ssing	_	Weld
		Cuffs				Contamination		Instruct	tions Incomplete/Ur	nclear	Part Moved	L		Wrong Stock Pulled
		Crushing				Countersink		Misalig	gned/off center		Positioned V	/rong		
		Heat Trea	it			Cut Too Short		Mislabe	eled		Power Loss/	Surge		Other
		Inspection	n Strip in	Tube		Drawing		Misrea	d					
		Marks/Ch	atter			Drill Holes		Off-set						
		Turning S	equence			Finish		Out of	Calibration					
		Wave/Tw	ist in Tub	oe .		Fit/Function		Out of	Sequence					

Work	Order	ID	124417
11 OII	Oluci	***	14TT1/

\*124417\*

Page 2

September-11-1	14 12:05:15	PM		1 /						Ü
Item ID: Revision ID: Item Name:	D3637-041 Bracket Asse	mbly		Accept	*N900	004010	n/* <sup>5</sup>	Setup Sta	10'2	31* 20*
Start Date: Required Date Reference:	9/10/14 e: 9/10/14	Start Qty: 8.00 Req'd Qty: 8.00	*8* *8*		Cust Item 1 Customer:				"IV.	<b>1</b> /"
Approvals:	Process Pl	an:	Date:	Tooling: SPC (Y/N):		ate:	<b>I</b> - -	Run Sta Sto	~!VF	
Sequence ID/ Work Center I 130 *120* Brake NC Brake NC	ID	Operation Description  NC BRAKE  Memo Form as per	Dwg D3637	Set Up/ Run Hours 0.00	Tool ID	Tool # Plan Code DAS 30 9-89		Reject Qty		Insp. Stamp
140  *140* Small Fab Small Fab			s as per dwg using DT897 late as per Dwg D3637	0.00 0.00 <sup>1</sup> 92-C'Sink as per Dwg D3637	7 3-		12x			0AS 36 9-89
150 <b>*150*</b> QC Quality Control		QC5- Inspect part comple	eteness to step on W/O	0.00			(1Z)			DAS 38 9-89 OCT 2 1 2014

DQA:			- Date:						SAANOT / LI	DDATE			DART
QA Closed:			Date:			WORK ORDER NON-	-CC	JNFOI	RIMANCE / UI		ork Order up	odate only	AEROSPACE
Manda Ond						DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	
Work Orde	er:					Rework			Skid-tube	Crosstube	1	Water Jet	Engineering
Part N	مام					Scrap			Machining	Small Fab	Pro	d. Eng. Coor.	Quality
raiti	١٠.					Use-as-is			noforming	Finishing	-1	re/Packaging	Other
NCR I	No.				,	Suspected Unapproved			Large Fab	Composite		Supplier	1 🗇
									· · · · · · · · · · · · · · · · · · ·	· <u> </u>		<u> </u>	
Root					Desc	ription of work order update	- !	nitial	Act	ion	Sign &	•	
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Descr	ription	Date	Verification	QC Inspector
Design													
Doc/Data													
Equip/Tooling													
Handling/Pre						•							,
Material													
Operator	_												
Offset/Setup	_				ļ								
Process	_												
Supplier	_												•
Training Transport													
Unapproved					ļ								
опаррточеа		<u>i</u>	.L	<u> </u>	<u> </u>		FAI	ULT CAT	TEGORY	<del>.</del>	. <del> </del>	· · · · · · · · · · · · · · · · · · ·	<u> </u>
Landi	ng (	Gear			<del></del>	General							
	Ť	Bending				Bend		Folio/P	rogram		Outside Dim	ensions	Pressure/Forced
		Centre N	ot Concer	ntric		BOM/Route		Grain			Over/Under	tolerance	Set-up
		Cracks				Broken/Damage/Defect		Hardwa	re		Part Incorred	ci	Temperature/Cure
		Crimp/Ki	nk/Ripple	/Wave		Burrs	L	Inspect	ion Incomplete/Ur	nqualified	Part Lost/Mi	ssing	Weld
•		Cuffs				Contamination		4	ions Incomplete/l	Jnclear	Part Moved	<u></u>	Wrong Stock Pulled
		Crushing				Countersink		-	ned/off center	<u> </u>	Positioned V		, * * · · · · · · · · · · · · · · · · ·
		Heat Trea				Cut Too Short		Mislabe			Power Loss/	Surge	Other
		Inspectio	•	Tube	<u> </u>	Drawing		Misread					
		Marks/Ch			<u> </u>	Drill Holes	_	Off-set					
	<u> </u>	Turning S	•			Finish	$\vdash$	4	Calibration				
		Wave/Tw	vist in Tuk	oe -		Fit/Function	L	Out of S	Sequence				

Work Order ID	124417
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## \*124417\*

Page 3

September-11-14 12:05:15 PM D3637-041 Accept **Item ID:** \*N900040100\* Setup Start **Revision ID: Item Name: Bracket Assembly** \*8\* **Start Date:** 9/10/14 Start Qty: 8.00 **Cust Item ID:** Required Date: 9/10/14 Req'd Qty: 8.00 **\***2\* **Customer:** Reference: Start Run **Approvals: Process Plan:** Date: **Tooling:** Date: Stop QC: Date:\_ SPC (Y/N): Date: Sequence ID/ Operation Accept Set Up/ **Tool ID** Tool # Plan Reject Reject Insp. **Work Center ID** Description **Run Hours** Code Qty **Qty** Number Stamp Identify as per dwg & Stock Location: \$7-053 DAS 160 0.00 \*160\* 14/10/21 Packaging 0.00 Memo Packaging 170 QC21- Final Inspection - Work Order Release 0.00 \*170\* 0.00 Memo Quality Control

Work Order:    Disposition   D	DQA:			. Date:											TRAC
Work Order:    Part No.							WORK ORDER NON-	-C(	ONFO	RMANCE / UF	PDATE		l. Od		AEROSPACE
Part No.   Scrap   Scrap   Use-as-is   Suspected Unapproved   Use-as-is   Use-a	QA Closed:			Date:					1			VV	ork Order up	date only	
Part No.	Work Orde	er:					DISPOSITION				AGAINST	DE	PARTMENT	/PROCESS	
Part No.	Work Orac	٠					Rework			Skid-tube	Crosstube		1	Water Jet	Engineering
NCR No.	Part N	lo.					<del></del>						Pro	<b></b>	
Root Cause Date Step Qty Description of work order update or non-conformance Chief Eng Description Description Date Verification QC Inspector Design Description Description Date Verification QC Inspector Description Description Date Verification QC Inspector Date of Date Verification Date Verification QC Inspector Date of Date Verification Date Veri		•					Use-as-is		Thern	noforming	Finishing		Rec/Sto	re/Packaging	Other
Cause         Date         Step         Qty         or non-conformance         Chief Eng         Description         Date         Verification         QC Inspector           Dos/Data         □         Image: Contamination         □         □         Image: Contamination         □ <td>NCR N</td> <td>No.</td> <td></td> <td></td> <td></td> <td></td> <td>Suspected Unapproved</td> <td></td> <td></td> <td>Large Fab</td> <td>Composite</td> <td></td> <td></td> <td>Supplier</td> <td>]</td>	NCR N	No.					Suspected Unapproved			Large Fab	Composite			Supplier	]
Cause         Date         Step         Qty         or non-conformance         Chief Eng         Description         Date         Verification         QC Inspector           Dos/Data         □         Image: Contamination         □         □         Image: Contamination         □ <td></td>															
Design	Root					Desc	ription of work order update	١	nitial	Act	ion		Sign &		
Doc/Data   Equip/Tooling   Handling/Pre   Material   Operator   Offset/Setup   Of	Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Descr	iption		Date	Verification	QC Inspector
Equip/Tooling Handling/Pre Material Government of the Material Government o	Design														
Handling/Pre Material Operator Offset/Setup Process Upplier Training Unapproved Unapprov	Doc/Data														
Material Operator Offset/Setup Process Supplier Training Transport Unapproved Defect Bends Bend Set-up Centre Not Concentric Order Not Concentric Cracks Broken/Damage/Defect Broken/Damage/Defect Broken/Damage/Defect Broken/Damage/Defect Burs Contamination Defect Inspection Incomplete/Unqualified Defect Part Moved Wrong Stock Pulled Wrong Stock Pulled	Equip/Tooling														
Operator Offset/Setup Process Supplier Training Transport Unapproved Unapprov	Handling/Pre					,,									
Offset/Setup Process Supplier Training Transport Unapproved Unappr	Material													!	
Process Supplier Training Transport Unapproved Unapprov	Operator														
Supplier Training Transport Unapproved    Description   De	Offset/Setup														
Training Transport Unapproved	Process														
Transport Unapproved	Supplier														
Landing Gear   General   Folio/Program   Outside Dimensions   Pressure/Forced   Set-up   Cracks   Broken/Damage/Defect   Hardware   Cuffs   Contamination   Contamination   Instructions Incomplete/Unclear   Part Moved   Wrong Stock Pulled	Training	<u> </u>													
Landing Gear   General   Folio/Program   Outside Dimensions   Pressure/Forced     Centre Not Concentric   BOM/Route   Grain   Over/Under tolerance   Set-up     Cracks   Broken/Damage/Defect   Hardware   Part Incorrect   Temperature/Cure     Crimp/Kink/Ripple/Wave   Burrs   Inspection Incomplete/Unqualified   Part Lost/Missing   Weld     Cuffs   Contamination   Instructions Incomplete/Unclear   Part Moved   Wrong Stock Pulled	,	$ldsymbol{ldsymbol{ldsymbol{eta}}}$	ļ												
Landing Gear  Bending Centre Not Concentric Cracks Crimp/Kink/Ripple/Wave Cuffs  General  Folio/Program Outside Dimensions Over/Under tolerance Folio/Program Folio/Program Over/Under tolerance Folio/Program Folio/Program Folio/Program Over/Under tolerance Folio/Program Folio/Progra	Unapproved		<u> </u>										<u></u>		
Bending Bend Folio/Program Outside Dimensions Pressure/Forced  Centre Not Concentric BOM/Route Grain Over/Under tolerance Set-up  Cracks Broken/Damage/Defect Hardware Part Incorrect Temperature/Cure  Crimp/Kink/Ripple/Wave Burrs Inspection Incomplete/Unqualified Part Lost/Missing Weld  Cuffs Contamination Instructions Incomplete/Unclear Part Moved Wrong Stock Pulled								FA	ULT CAT	EGORY				<del></del>	
Centre Not Concentric BOM/Route Grain Over/Under tolerance Set-up Cracks Broken/Damage/Defect Hardware Part Incorrect Temperature/Cure Crimp/Kink/Ripple/Wave Burrs Inspection Incomplete/Unqualified Part Lost/Missing Weld Cuffs Contamination Instructions Incomplete/Unclear Part Moved Wrong Stock Pulled	Landi	ng (	1				7	_	le-1:- /6		i	1	10		
Cracks Broken/Damage/Defect Hardware Part Incorrect Temperature/Cure Crimp/Kink/Ripple/Wave Burrs Inspection Incomplete/Unqualified Part Lost/Missing Weld Cuffs Contamination Instructions Incomplete/Unclear Part Moved Wrong Stock Pulled		<u> </u>	1			-		H	ŧ .	rogram			4		
Crimp/Kink/Ripple/Wave Burrs Inspection Incomplete/Unqualified Part Lost/Missing Weld Contamination Instructions Incomplete/Unclear Part Moved Wrong Stock Pulled		-	1	ot Concen	itric	-	i '	-	4	,			4 '	<u> </u>	<b>-</b>
Cuffs Contamination Instructions Incomplete/Unclear Part Moved Wrong Stock Pulled			4	alı/Dinnla	Mayo	-	1		1		auglified		-1		<b>-</b>
		_	1	ik/Kippie,	vvave	$\vdash$		<u> </u>	1		-		-1	-	
		}—	1			-	4	_	4	•	Jiicical .		4	∟ Vrong	
Heat Treat Cut Too Short Mislabeled Power Loss/Surge Other			4	at .		-	4	-	4			_	4	_	Other
Inspection Strip in Tube Drawing Misread		$\vdash$	4		Tube		<del>-</del>		4				1. 22. 2033)		1
Marks/Chatter Drill Holes Off-set		-	1			$\vdash$	-	$\vdash$	4						
Turning Sequence Finish Out of Calibration			4				1		4					· ' <del>'</del>	****
Wave/Twist in Tube Fit/Function Out of Sequence	·		1 -		e		4	T	4						

## **Picklist Print**

September-11-14 12:05:15 PM

Work Order ID: 124417

\*124417\*

Parent Item:

D3637-041

\*D3637-041\*

Parent Item Name: Bracket Assembly

**Start Date: 9/10/14** 

Required Date: 9/10/14

Page 1

Start Qty: 8.00

Required Qty: 8.00

**Comments:** 

IPP Rev:A New Issue 07-07-20 JLM

Verified By:EC

change to REV.B as per dwg 08-02-11 DD verified by:ec IPP Rev:B

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S14GA		Purchased	No			140	sf	191.2500	0.09	1			DAS
*M304S12 304SS sheet .080	1GA*								**			Dely	/ <sub>10</sub> / <sub>10</sub> 9-89
				Location	!	Loc	<u>Oty</u>	Loc Code					
				MAT020		19	1.25				_		
				,	(M12607)5	$\epsilon$	33.25		_	1.666	<del></del>		
MS20426AD3-3		Purchased	No		M129972	100	128 Each	3,767.000		16	_	/ /	nas
	\ D0 0+		110			100	Lacii	3,707.000	**	16		/	DAS 36 9-89
*MS20426	)AI );3-;3^			* *					** -		_/4//	5/2/	9-89
				Location		Loc	<u>Oty</u>	Loc Code			ι/	/	
				ST315		:	3767		_		_		
					123352 M128754	,	312 3455		_	<del>1</del>	-		
MS21059L4		Purchased	No		W1120734	140	Each	92.0000	1	<del>Ø 7</del> 8	- 1	· /	DAS
*MS21059	11 4*	Turchascu				2.0	Lucii	> <b>2.</b> 0000	**	0		. / .	DAS 36 +89
With A Trans	11 4"										- 1411	0/2/	<i>}</i> -89
<b>F</b>				Location		Loc	<u>Oty</u>	Loc Code			" /	1	ŧ.
				GA		•	92				_		
					m129764		92		_	12	_		

DQA:			Date:						_				TRACT
						WORK ORDER NON	-CC	ONFO	RMANCE / UF				AEROSPACE
QA Closed:			Date:							W	ork Order up	date only	
Work Orde	ar.					DISPOSITION				AGAINST DE	PARTMENT	PROCESS	
WOIR Old	٠.				_	Rework	1		Skid-tube	Crosstube	1	Water Jet	Engineering
Part N	lo.					Scrap			Machining	Small Fab	Pro	d. Eng. Coor.	Quality
						Use-as-is		Thern	noforming	Finishing	Rec/Stor	e/Packaging	Other
NCR N	lo.					Suspected Unapproved	]		Large Fab	Composite		Supplier	
				·								· · · · · · · · · · · · · · · · · · ·	
Root					Desci	ription of work order update	1	Initial	Acti		Sign &	<u></u>	
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Descr	iption	Date	Verification	QC Inspector
Design				:									
Doc/Data													
Equip/Tooling													
Handling/Pre											]		
Material												•	
Operator													
Offset/Setup													
Process													
Supplier							ļ						
Training													
Transport													
Unapproved													<u> </u>
							FAI	ULT CA	TEGORY	<del></del>	-		
Landi	ng (	Sear			_	General		1 .			7	_	¬
	-	Bending			<u> </u>	Bend		1	Program	_	Outside Dim	<u>-</u> -	Pressure/Forced
		Centre No	ot Concer	ntric	lacksquare	BOM/Route	$\vdash$	Grain		<u> </u>	Over/Under	_	Set-up
		Cracks				Broken/Damage/Defect		Hardwa		<u> </u>	Part Incorred	<b>⊢</b>	Temperature/Cure
		Crimp/Kir	nk/Ripple	/Wave	ļ	Burrs		4	ion Incomplete/Un		Part Lost/Mi	ssing	Weld
		Cuffs				Contamination	_	4	tions Incomplete/L	Jnclear	Part Moved	L	Wrong Stock Pulled
		Crushing			<u> </u>	Countersink	<u></u>	1	gned/off center		Positioned V	_	¬
		Heat Trea			<u> </u>	Cut Too Short		Mislabe		L	Power Loss/	Surge	Other
		Inspection	•	Tube		Drawing	$\Box$	Misrea					
		Marks/Ch	atter			Drill Holes		Off-set				a	
		Turning S	equence			Finish	L	4	Calibration				<del></del>
		Wave/Tw	ist in Tub	e		Fit/Function		Out of	Sequence				Maria de la compansión de

DART AEROSPACE LTD	Work Order:	124417
Description: Bracket	Part Number:	D3637-1
Inspection Dwg: D3637 Rev: B		Page 1 of 1

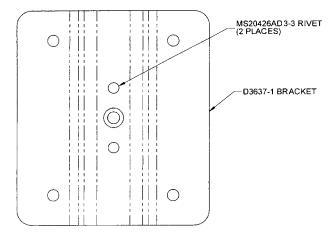
## FIRST ARTICLE INSPECTION CHECKLIST

х	First Artic	le	Proto	type
Toloranas	Actual	Assent	Painet	Metho

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.098	+0.004/-0.001	-099	_		1=2km-01	
Ø0.328	+0.006/-0.001	. 328	/			
3.63	+/-0.030	3.64	7			
3.60	+/-0.030	3.60	_			
1.80	+/-0.030	1.80	/			
0.500	+/-0.010	. 500	/			
1.82	+/-0.030	1.82				
	DAS		DAS			
	23	·		,	1	

Rev	Date	Change			Revised, by	Approved
Α	08.04.15	New Issue	P/O D3637-041	•	KJ/DD A	7
					• • • • • • • • • • • • • • • • • • • •	

MS21059L4 NUT PLATE



D3637-041 BRACKET ASSEMBLY (WAS GENEVA P/N G10602-1)

## D3637-041 PARTS:

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D

QTY	P/N	DESCRIPTION		
Х	D3637-041	BRACKET ASSEMBLY		
1	D3637-1	BRACKET		
1	MS21059L4	NUTPLATE		
2	MS20426AD3-3	RIVET		

D3637-041 NOTES:
1) MATERIAL: N/A
2) FINISH: N/A
3) TOLERANCES: N/A
4) UNITS: N/A
5) BREAK SHARP EDGES: N/A
6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3637-041" USING FINE POINT PERMANENT INK MARKER
7) WEIGHT: 0.27 lbs

SHOP COPY RETURN TO ENGINEERING UNCONTROLLED COPY SUBJECT TO AMENDMENT WITHOUT NOTICE
WORK ORDER
NO. 17 4417 MLS
14-09-17

D



В	FOR D3	337-1, 1 15 WAS	1.30 & "REF" REMOVED FROM ANGLE	LE	07.12.18		
Α	NEW IS	SUE; REPLACE	LE	07.07.27			
REV.	DESCRIPTION				DATE		
DESIGN TS		JS	DART AEROSPACE LTD				
DRAWN		1	HAWKESBURY, ONTARIO, CANADA				
CHECKED		94	DRAWING NO.		REV. B		
MFG. APPR.		60	D3637		SHEET 1 OF 3		
APPROVED		10	TOLE		SCALE		
DE APPR.		-H	BRACKET		1:1		
DATE 07.12.18			COPYRIGHT © 2007 BY DART AEROSPACE LTD THIS DOCUMENT IS PRINATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPLISE OF CONFIGUROR CON ECOMMUNICATED TO ANY OTHER PERSON VATINGST.				

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